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000.	Substitute for 1990 to 10			Application Number	10/634,177
IN	FORMATION DISC	CLO	SURE	Filing Date	August 5, 2003
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT		First Named Inventor	Michael William Willson	
U	IAICMENT DI A	. –	OAIII	Art Unit	1625
	(Use as many sheets as ned	essary	)	Examiner Name	Evelyn Mei Huang
Sheet	2	of	3	Attorney Docket Number	PC 25272A

Examiner	Cita	Document Number	U. S. PATENT D Publication Date	Name of Patentee or	Pages Columns Lines Where
Initials*	Cite No.1	Number-Kind Code <sup>2 (# known)</sup>	MM-DD-YYYY	Applicant of Cited Document	Pages, Columns, Lines, Where Relevent Passages or Relevant Figures Appear
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	FOREIGN PATENT DOCUMENTS									
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines,					
Initials*	No.'	Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T.				
SS		WO 02/34726 A2/A3	05/02/2002	Noe, et al.						
814		WO 02/34753 A2/A3	05/02/2002	Bronk, et al.		Г				
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<b>7</b>	Substitute for form 1449A/PTO			Complete if Known			
			Application Number	10/634,177			
	IN	FORMATION DIS	CLC	SURE	Filing Date	August 5, 2003	
	ST	TATEMENT BY A	PPL	CANT	First Named Inventor	Michael William Wilson	·
	•				Art Unit	1625	
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She	et	11	of	4	Attorney Docket Number	PC 25272A	

			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date - MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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	FOREIGN PATENT DOCUMENTS							
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines,	_		
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SN		EP 1 138 680 A1	10/04/2001	Noe		$\Box$		
1		EP 0 935 963 A2/A3	08/18/1999	McClure, et al.				
	Ī	WO 00/09485 A1	02/24/2000	McClure, et al.				
		WO 01/12611 A1	02/22/2001	Blagg	***************************************			
BM	Ţ	WO 01/63244 A1	08/30/2001	Chen, et al.	·			

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Substitute for for	m 1449B/PTO	· · · · · · · · · · · · · · · · · · ·		Complete If Known		
				Application Number	10/634,177	
INFORM	MATION D	DISCLOS	SURE	Filing Date	August 5, 2003	
STATE	MENT BY	APPLIC	CANT	First Named Inventor	Michael William Wilson	
				Art Unit	1625	
(Use as many sheets as necessary)				Examiner Name	Evelyn Mei Huang	
Sheet	3	of	4	Attorney Docket Number	PC 25272A	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
SW		BILLINGHURST, et al., Comparison of the Degradation of Type II Collagen and Proteoglycan in Nasal and Articular Cartilages Induced by Interleukin-1 and the Selective Inhibition of Type II Collagen Cleavage by Collagenase, Arthritis & Rheumatism, 2000; 43(3): 664-672	
		BILLINGHURST, et al., Enhanced Cleavage of Type II Collagen by Collagenases in Osteoarthritic Articular Cartilage, J. Clin Invest., 1997; 99(7): 1534-1545	•••••
	)	CHEN, et al., Structure-Based Design of a Novel, Potent, and selective Inhibitor for MMP-13 Utilizing NMR Spectroscopy and Computer-Aided Molecular Design, J. Am. Chem. Soc., 2000; 122: 9648-9654	*******
		DAHLBERG, et al., Selective Enhancement of Collagenase-mediated Cleavage of Resident Type II Collagen in Cultured Osteoarthritic Cartilage and Arrest with a Synthetic Inhibitor that Spares Collagenase 1 (Matrix Metalloproteinase2), Arthritis & Rheumatism, 2000; 43(3): 673-682	*******
		HARRIS, The Oxidation of N-(2-pYRIDYL) Thioureas. The Synthesis of [1.2.4] Thaiadiazolo [2,3-a] Pyridinium Salts, Aust. J. Chem., 1972;25(5): 993-1001	******
		HIROTA, et al., Novel Synthesis of Pyrido[3,4-d]pyrimidines, Pyrido[2,3-d]pyrimidines, and Quinazolines via Palladium-catalyzed Oxidative Coupling, Heterocycles, 1994; 37(1): 563-570	
	•••••	LOVEJOY, et al., Crystal structures of MMP-1 AND -13 reveal the structural basis for selectivity of collagenase inhibitors, Nature Structural Biology, 1999; 6(3): 217-221	******
		MITCHELL, et al., Cloning, Expression, and Type II Collagenolytic Activity of Matrix Metaloproteinase-13 from Human Osteoarthritic, Cartilage, J. Clin. Invest., 1996; 97: 761-768	
		MOY, et al., High-resolution Solution Structure of the Cataliytic Fragment of Human Collagenase-3 (MMP-3) Complexed with a Hydroxamic Acid Inhibitor, J. Mol. Biol., 2000; 302: 671-689	••••••
Stat		NEUHOLD, et al., Postnatal expression in hyaline cartilage of constitutively active human collagenase-3 (MMP-13) induces osteoarthritis in mice, J. Clin. Invest., 2001; 107(1): 35-44	********

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Substitute for form 1449B/PTO Complete if Known Application Number 10/634,177 INFORMATION DISCLOSURE Filing Date August 5, 2003 First Named Inventor STATEMENT BY APPLICANT Michael William Wilson Art Unit 1625 (Use as many sheets as necessary) Exeminer Name Evelyn Mei Huang Sheet Attorney Docket Number 4 PC 25272A

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²		
814		Office Action mailed June 16, 2003 in U.S.S.N. 10/264,764			
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